DOCKET NO. D-2012-001 CP-2

DELAWARE RIVER BASIN COMMISSION

Lower Bucks County Joint Municipal Authority Water Filtration Plant Tullytown Borough, Bucks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Lower Bucks County Joint Municipal Authority (LBCJMA or docket holder) on May 27, 2016 (Application), for renewal of the docket holder's existing Water Filtration Plant (WFP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0056880 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on May 16, 2012, effective June 1, 2012

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 17, 2017.

A. <u>DESCRIPTION</u>

- **1. Purpose**. The purpose of this docket is to renew approval of the docket holder's existing WFP and its related. The WFP treats up to 16 million gallons per day (mgd) for public water supply and discharges 0.7 mgd of filter backwash water via Outfall No. 003 and intermittently discharges up to 0.48 mgd of sedimentation basin supernatant via Outfall No. 002.
- **Location**. The discharge will continue to discharge treated effluent directly to Water Quality Zone 2 Delaware River at River Mile 122.3 (Delaware River) via Outfall Nos. 002 and 003 in Tullytown Borough, Bucks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
002	40° 07' 54''	74° 49' 08''
003	40° 07' 54''	74° 49' 08''

3. Area Served. The docket holder's WFP will continue to supply drinking water to Tullytown Borough as well as Bristol, Falls, and Middletown Townships located in Bucks County, Pennsylvania. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. Physical Features.

- **a.** <u>Design Criteria</u>. The docket holder will continue to operate its existing WFP, treating up to 16 mgd, which will continue to discharge up to 0.70 mgd of treated filter backwash to Franklin Cove and the Delaware River. The existing WFP will also continue to discharge up to 0.48 mgd of treated supernatant on a semiannual basis (twice per year) for the cleansing of the rectangular sedimentation basins. In the event of an emergency or maintenance, the WFP will convey its effluent to the existing LBCJMA WWTP via existing infrastructure.
- **b.** <u>Facilities</u>. The existing WFP consists of three raw water pumps (ground water and surface water), a traveling bar screen, a flash mixing tank, two flocculation tanks with peddle mixers, a circular settling tank, two rectangular settling basins, four high-rate dual media filters. Treated effluent is pumped from a clear well through four high-service pumps. Liquid sludge is transferred to a sludge mixing tank/waste tank, a sludge thickening tank, a sludge holding tank, and two filter presses. Excess filtrate from the filter presses and treated clarified water or clarified supernatant are fed to a slant tank that discharges from Outfall No. 003 to the Delaware River periodically. Treated process water used in cleaning the rectangular settling basins is discharged from Outfall No. 002 twice each year.

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a state approved facility.

- **c.** <u>Water withdrawals</u>. The potable water supply in the project service area is supplied by the docket holder. The docket holder's WFP processes up to 16 mgd of water. The water treated by the WFP is withdrawn from the Delaware River and five (5) groundwater wells. These withdrawals are described in Docket No. D-1969-190 CP, which was approved by the Commission on February 25, 1970.
- **d.** <u>NPDES Permit / DRBC Docket</u>. NPDES Permit No. PA0056880 was issued by the PADEP on May 16, 2012 (effective June 1, 2012) and includes final effluent limitations for the design discharge of 0.7 mgd to surface waters classified by the PADEP as Warm Water/Migratory Fishery (WWF/MF). The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALLS 002 & 003 (Discharges to Delaware River)				
PARAMETER	LIMIT	MONITORING		
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit		
Total Suspended Solids	30 mg/l	As required by NPDES Permit		

The requirements in EFFLUENT TABLE A-2 and A-3 are not listed in the NPDES Permit, but are Commission basin-wide parameters that must be met as a condition of this docket approval.

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 002 (Discharges Twice per Year to Delaware River)			
PARAMETER	LIMIT	MONITORING	
Total Dissolved Solids*	Monitor & Report *	During each discharge **	
CBOD ₅ (at 20° C)*	Monitor & Report *	During each discharge *	
Ammonia Nitrogen*	Monitor & Report *	During each discharge *	

^{*} DRBC Requirement

EFFLUENT TABLE A-3: DRBC Parameters Not Included in NPDES Permit

OUTFALL 003 (Discharges Filter Backwash to Delaware River)				
PARAMETER	LIMIT	MONITORING		
Total Dissolved Solids*	Monitor & Report *	Quarterly **		
CBOD ₅ (at 20° C)*	Monitor & Report *	Quarterly *		
Ammonia Nitrogen*	Monitor & Report *	Quarterly *		

^{*} DRBC Requirement

- **e. Cost**. There are no construction costs associated with this renewal.
- **f.** Relationship to the Comprehensive Plan. The LBCJMA WFP was included in the Comprehensive Plan via Docket No. D-2012-001 CP-1 on July 11, 2012. Issuance of this docket will continue approval of the docket holder's WWTP in the Comprehensive Plan (See DECISION Condition C.I.c.).

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing WFP and the discharge of up to 0.7 mgd of filter backwash via Outfall No. 003. This docket also approves the intermittent discharges (approximately twice per year) of up to 0.48 mgd of filter backwash via Outfall No. 002 and emergency/maintenance discharges to the LBCJMA WWTP conveyance system, which discharges to the Water Quality Zone 2 of the tidal Delaware River at River Mile 122.1. Intermittent discharges to the Delaware River from the docket holder's existing WFP began in October 2015.

^{**} See DECISION Condition C.II.s.

^{**} See DECISION Condition C.II.s.

At the project discharge site, the Delaware River is tidal and its flow is regulated by upstream reservoir releases. The Trenton low flow target is 2,500 cfs (1.62 billion gallons per day). The addition of the tidal tributaries upstream of the discharge location at their Q_{7-10} flow and the low flow Trenton target results in a low flow of roughly 2,634 cfs (1.702 billion gallons per day) for the Delaware River at the discharge location (River Mile 122.3).

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 3.5 River Miles downstream of the docket holder's WFP and is operated by the City of Burlington.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The effluent limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *Water Quality Regulations (WQR)*.

C. DECISION

- I. Effective on the approval date for Docket No. D-2012-001 CP-2 below:
- a. The project described in Docket No. D-2012-001 CP-1 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2012-001 CP-2; and
- b. Docket No. D-2012-001 CP-1 is terminated and replaced by Docket No. D-2012-001 CP-2; and
- c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be continued in the Comprehensive Plan.
- II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:
- a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit (and Part II Permit if appropriate).
- b. The facility and operational records shall be available at all times for inspection by the DRBC.
- c. The facility shall be operated at all times to comply with the requirements of the Commission's *WOR*.

- d. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results <u>electronically</u> to the DRBC Project Review Section via email <u>aemr@drbc.state.nj.us</u> on the **Annual Effluent Monitoring Report Form** located at this web address: http://www.state.nj.us/drbc/programs/project/pr/info.html. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.
- e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.
- f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.
- g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.
- h. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.
- i. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.
- j. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).
- k. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.
- 1. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.
- m. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the

event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

- n. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations (see 18 CFR 401.43).
- o. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).
- p. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).
- q. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.
- r. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.
- s. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.
- t. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED: September 13, 2017

EXPIRATION DATE: September 30, 2022